North America's Leader in Hazardous Material Information Management

1905 Aston Avenue, Carlsbad, CA 92008 Phone (800) 451-8346 Fax (760) 602-8888

MSDS PRODUCT INFORMATION

Date: 10/07/2005

To: MSDS Requester

From: 3E Company

Subject: The MSDS you have requested

[] MSDS NOT REQUIRED

In response to your request for a Material Safety Data Sheet, according to the OSHA Hazard Communicatin Standard (Right-to-Know), the following item is an article. Articles are defined in 29 CFR 1910.1200(c). Products such as Drugs, cosmetics, food, or alcoholic beverages, wood or wood products, and tobacco or tobacco products, as defined in 29 CFR1910.1200(b)(6), are exempt from the Hazard Communication Standard. Items that are considered articles, as defined in 29 CFR 1910.1200(c), are also exempt from this Standard. Therefore, the manufacturer is not required to provide an MSDS for this product.

[X] MSDS DISCONTINUED PRODUCT

In response to your request for a Material Safety Data Sheet, the manufacturer has discontinued the product listed below. The MSDS Attached is the most current version, or an MSDS is no longer available.

[] MSDS BEST COPY AVAILABLE

The MSDS attached is the best copy available from the manufacturer.

[] MANUFACTURER NO LONGER IN BUSINESS

In response to your request for a Material Safety Data Sheet, a current MSDS could not be obtained for this product. It has been determined that the manufacturer listed below is no longer in business. A current address and phone number could not be located.

Manufacturer: Solaris Group

Product Name: Roundup Super Concentrate Weed & Grass Killer (DISCONTINUED)



3E COMPANY North America's Leader in Hazardous Material Information Management 1905 Aston Avenue, Carlsbad, CA 92008 Phone (800) 451-8346 Fax (760) 602-8856

MSDS DISCONTINUED PRODUCT

Date: 10/23/2001

To: MSDS Requester

From: 3E Company

Subject: The MSDS you have requested

In response to your request for a Material Safety Data Sheet, the manufacturer has discontinued the product listed below. The MSDS attached is the most current version, or an MSDS is no longer available.

Manufacturer: Solaris Group

ProductName: Roundup Super Concentrate Weed & Grass Killer (DISCONTINUED)

MATERIAL SAFETY DATA SHEET

DATE PREPARED: 08/03/1995

MSDS No: 6048

Roundup® Super Concentrate Weed & Grass Killer

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Roundup® Super Concentrate Weed & Grass Killer

PRODUCT DESCRIPTION: Herbicide

MANUFACTURER

The SOLARIS Group

of Monsanto Company

P.O. Box 5008

San Ramon, CA 94583-0808

EPA REG. NO.: 239-2637 PN: 6042

24 HR. EMERGENCY TELEPHONE NUMBERS

Emergency Phone 800-454-2333

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical NameWt.%CAS Registry #Glyphosate, Isopropylamine salt of N-(phosphonomethyl) glycine4138641-94-0INERT INGREDIENTS~ 59 .0

"Inert Ingredients" is a term defined by the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide, and Rodenticide Act (40 CFR 158.153). It refers to any substance, other than an active ingredient, which is intentionally added to a pesticide product. Some inert ingredients may be hazardous chemicals, as defined by the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). The hazards associated with these inert ingredients have been included in this document.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Liquid with a slight ammonia odor.

IMMEDIATE CONCERNS: - AVOID CONTACT WITH EYES,

SKIN OR CLOTHING

- CAUSES SUBSTANTIAL BUT TEMPORARY EYE INJURY
- KEEP OUT OF REACH OF CHILDREN

POTENTIAL HEALTH EFFECTS

EYES: Eye contact may include discomfort, tearing, swelling, redness, and blurred vision. See Toxicology Information, section (11).

SKIN: This substance is not expected to cause prolonged or significant skin irritation. If absorbed through the skin, this substance is considered practically non-toxic to internal organs. See Toxicological Information, section 11.

INGESTION: Ingestion may produce irritation of the digestive tract as demonstrated by signs and symptoms of mouth membrane irritation, nausea, vomiting and diarrhea.

INHALATION: Results of a rat 4 hour acute aerosol inhalation study indicated slight toxicity. See Toxicological Information, section (11).

4. FIRST AID MEASURES

EYES: Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Call a physician if irritation persists.

SKIN: No first aid procedures are required. As a precaution, wash skin thoroughly with soap and water. Remove and wash contaminated clothing.

INGESTION: If swallowed, immediately telephone a poison control center, emergency treatment center or a physician for advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then immediately take person and product container, with label, to an emergency treatment center.

INHALATION: If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

ADDITIONAL INFORMATION: In case of medical emergencies involving this product, call collect day or night, 1-314-694-4000.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: >200°F TAG CC

EXTINGUISHING MEDIA: Water spray, foam, CO2, dry chemical or any class B extinguishing agent.

HAZARDOUS COMBUSTION PRODUCTS: This material will not burn.

FIRE FIGHTING PROCEDURES: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire document.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: While wearing rubber gloves, soak up spilled material with paper towels and discard in trash.

LARGE SPILL: Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section 13. "DISPOSAL". Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water.

For liquid spills that soak into the ground, contact the applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section 13 "DISPOSAL" for instructions.

Leaking containers should be separated from non-leakers and either the container or its contents transferred to a drum or other non-leaking container and disposed of in accordance with instructions provided under Section 13 "Disposal". Any recovered spilled liquid should be similarly collected and disposed of.

Do not contaminate water, foodstuffs or feed by storage or disposal.

GENERAL PROCEDURES: Observe all protection and safety precautions when cleaning up spills -- see Section 8. "EXPOSURE CONTROLS/PERSONAL PROTECTION". For help with any spill, leak, fire or exposure involving this material, call day or night (800) 454-2333.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep pesticide in original container. Store in a secure, preferably locked, storage area. Protect container from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: No special ventilation is necessary.

PERSONAL PROTECTION

EYES AND FACE: For application of product diluted in accordance with label instructions, no special eye protection is needed.

Handling of the undiluted product is not likely to present an eye exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which could cause eye contact, workers should wear goggles or a face shield.

SKIN: No special skin protection is usually necessary. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing protective clothing. Wash throughly with soap and water after handling.

RESPIRATORY: Handling of the undiluted product is not likely to present an airborne exposure concern during normal handling. In the event of an accidential discharge of the material during manufacture or handling which produces a heavy vapor or mist, workers should put on respiratory protection equipment. Consult respirator manufacturer to determine appropriate type of equipment. Observe respirator use limitations specified by NIOSH MSHA or the manufacturer.

For application of product diluted in accordance with label instructions, no special respiratory protection is required.

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

Chemical Name

Ethoxylated Tallowamines

EXPOSURE LIMITS
OSHA PELACGIH TLVACGIH STEL

None None

None

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

APPEARANCE: Liquid with a slight ammonia odor

pH: 4.7

PERCENT VOLATILE: Not Determined

VAPOR PRESSURE: Not Determined

BOILING POINT: Not Determined

FREEZING POINT: Not Determined

SOLUBILITY IN WATER: Soluble

EVAPORATION RATE: Not Determined

SPECIFIC GRAVITY: 1.17 at 20°C

VISCOSITY: Same as water.

COMMENTS:

DENSITY: 9.731 lb/gal

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: NO

STABILITY: Mix, spray, apply and store solutions of this product only in stainless steel, aluminum, fiberglass, plastic or plastic-lined steel containers.

DO NOT MIX, APPLY OR STORE THIS PRODUCT OR SPRAY SOLUTIONS OF THIS PRODUCT IN GALVANIZED OR UNLINED STEEL (EXCEPT STAINLESS STEEL) SPRAYERS, because the product and such containers can react to produce a highly combustible mixture of hydrogen gas. This buildup of hydrogen gas in a closed container can create enough pressure to cause the container to rupture, or can flash or explode, causing serious personal injury, if ignited by open flame, spark, welders torch, lit cigarette or any other ignition source.

INCOMPATIBLE MATERIALS: May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

COMMENTS: Product is stable for at least 5 years under normal conditions of warehouse storage.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: Based on the results of the rabbit irritation test, this product is considered to be slightly irritating to the eyes. Slight ocular irritation, including conjunctival redness and corneal opacity were observed. The eyes of all animals were clear by day 7.

DERMAL LD $_{50}$: Slightly irritating with very slight to well defined erythema at the 1 hour scoring interval. All erythema resolved by 24 hours. (Rabbit 4 hour exposure). The acute dermal LD50 in rabbits is greater then 5000 mg/kg. No skin allergy was observed in guinea pigs following

repeated skin exposures.

ORAL LD₅₀: Practically nontoxic. Rat acute oral LD50 >5,000 mg/kg. EPA FIFRA toxicity category - IV.

INHALATION LC₅₀: The rat acute inhalation LC50 = 2.6 mg/l (EPA Toxicity Category - IV).

GENERAL COMMENTS: Data from laboratory studies conducted with a formulation comprised of 62% isopropylamine salt of glyphosate (MON 0139) indicate the following:

In repeat dosing studies (6-month) dogs fed MON 0139 exhibited slight body weight changes. Following repeated skin exposure (3-week) to MON 0139, skin irritation was the primary effect in rabbits.

Additional toxicity information is available on glyphosate, the active herbicidal ingredient of MON 0139. Following repeated exposures (90-days) to glyphosate in their feed, decreased weight gains were noted at the highest test level in mice, while no treatment-related effects occurred in rats. Following repeated skin exposure (3 weeks) to glyphosate, slight skin irritation was the primary effect observed in rabbits. No skin allergy was observed in guinea pigs following repeated skin exposure. There was no evidence of effects on the nervous system, including delayed effects in chickens (repeat oral doses) or cholinesterase inhibition in rats (single oral doses). Reduced body weight gain and effects on liver tissues were observed with long-term (2-year) feeding of glyphosate to mice at high dose levels. Reduced body weight gain and eye changes were observed at the high dose level in one long term (2-year) feeding study with rats, while no treatment related effects occurred in a second study at lower dose levels. No adverse effects were observed in feeding studies with dogs. Glyphosate did not produce tumors in any of these studies. Based on the results from the chronic studies, EPA has classified glyphosate in category E (evidence of noncarcinogenicity for humans). No birth defects were noted in rats and rabbits given glyphosate orally during pregnancy, even at amounts which produced adverse effects on the mothers. Glyphosate was fed continuously to rats at very high dose levels for 2 successive generations. Toxicity was reported in offspring from the high dose, a level which also produced adverse effects on the mothers. In a 3-generation study conducted at lower dose levels, no effects were seen on the ability of male or female rats to reproduce. Glyphosate has produced no genetic changes in a variety of standard tests using animals and animal or bacterial cells.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

ECOTOXICOLOGICAL INFORMATION: Studies performed

with a concentrated solution of the isopropylamine salt of glyphosate indicate the following:

MON 0139 Technical (62%)

48-hr LC50 Daphnia: 930 mg/L, Practically Nontoxic 96-hr LC50 Bluegill: >1,000 mg/L, Practically Nontoxic 96-hr LC50 Trout: >1,000 mg/L, Practically Nontoxic 96-hr LC50 Carp: >10,000 ppm, Practically Nontoxic

13. DISPOSAL CONSIDERATIONS

FOR LARGE SPILLS: Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures.

PRODUCT DISPOSAL: The Solaris Group is committed to responsible environmental practices and recommends that all of the product be used up, carefully following all label directions and precautions.

If necessary to dispose of partially filled product container, then securely wrap it in several layers of newspaper and discard in trash.

EMPTY CONTAINER: Do not reuse container. Rinse throughly before discarding in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated

PRIMARY HAZARD CLASS/DIVISION: None

UN/NA NUMBER: None

PACKING GROUP: No

U.S. SURFACE FREIGHT CLASS: Tree or weed killing compounds, NOI, Density of 20 lbs. or greater per cu. ft.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Not Regulated

SPECIAL SHIPPING NOTES: The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical

name) and mode-specific or quantity-specific shipping requirements.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA
ACUTE: CHRONIC: FIRE: REACTIVITY: PRESSURE
YES NO NO GENERATING: NO

311/312 HAZARD CATEGORIES: Immediate

313 REPORTABLE INGREDIENTS: None

TITLE III NOTES: Immediate (acute) health hazard: Product is moderately irritating to the eyes.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All non FIFRA regulated components are on the US EPA's TSCA Inventory List.

STATE REGULATIONS

PROPOSITION 65 STATEMENT: Not listed

16. OTHER INFORMATION

HMIS CODES

FIRE: 0 HEALTH: 2 REACTIVITY: 0 PROTECTION: -

NFPA CODES

FIRE: 0 HEALTH: 1 REACTIVITY: 0 SPECIAL: -

APPROVAL DATE: 09/12/1995

REVISION SUMMARY New MSDS

COMMENTS: For additional information concerning this product, call the SOLARIS Groups Consumer Helpline at 800-225-2883.

MANUFACTURER DISCLAIMER: This Material Safety Data Sheet (MSDS) contains health, safety and environmental information for you and your employees. It does not replace the precautionary language,

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use directions, or the storage and disposal information found on the product label. Information contained in this MSDS will help you to prepare for emergency response and to meet community right-to-know, emergency response and reporting requirements under SARA Title III and many other laws. Emergency response agencies and health care providers will also find this additional information useful.

Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved label copy. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Although the information and recommendations set forth herein (herinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Monsanto Company and The Solaris Group make no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determinations as to its suitability for their purposees prior to use. In no event will Monsanto Company or The Solaris Group be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.